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a dot area, formed at an overlapping portion of the first electrode and second electrode, for display;

a color filter positioned between the liquid crystal material and one of the first and the second electrode;

wherein the color filter is selectively arranged in the dot area.

REMARKS

Claims 30, 31, 33-41 and 44-67 are pending. By this Amendment, claims 38 and 56 are amended.

Entry of the amendments is proper under 37 C.F.R. §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration since the amendments are merely for clarity; (c) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) place the application in better form for appeal, should an appeal be necessary. Entry of the amendments is thus respectfully requested.

Applicants appreciate that the Office Action indicates that claims 30, 31, 33, 49-55, 59 and 63 are allowed.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Reconsideration based on the following remarks is respectfully requested.

I. The Claims Define Patentable Subject Matter

The Office Action rejects claims 37, 56-62 and 64-67 under 35 U.S.C. §102(e) over USP 5,365,357 to Ohgawara et al. Applicants assume that it was not the Examiner's intention to reject claim 59 under 35 U.S.C. §102(e) since claim 59 is indicated as allowable. This rejection is respectfully traversed.

A rejection under 35 U.S.C. §102 can only be asserted if the applied reference discloses all features of the claims. In fact, 35 U.S.C. §102(e) provides "a person shall be

entitled to a patent unless (e) the invention was described in a patent granted on an application for patent for another filed in the United States before the invention thereof by the Applicant for patent, ..." MPEP §2131 provides that "to anticipate a claim, the reference must teach every element of the claim." A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

However, the Office Action states that "it would have been obvious to one or ordinary skill in the art to employ a protection layer on the color filter layer for several advantages..." Thus, the Office Action admits that Ohgawara does not disclose all features of the claimed invention.

Because Ohgawara does not disclose all features of independent claims 37, 56, 61 and 62, the Office Action is facially defective for making an improper rejection. Thus, the Office Action must be withdrawn. If a rejection is to be maintained regarding Ohgawara, then a new Office Action must be issued regarding the claims under another section, such as 35 U.S.C. §103, for example.

However, even such a §103 rejection would be improper. Claim 37 recites a layer arranged in the second section, and being substantially transparent. Applicants respectfully disagree with the Office Action's assertion that it would have been obvious to one of ordinary skill in the art to employ a protection layer on the color filter layer. MPEP §2142 provides that to establish a *prima facie* case of obviousness, three basic criteria must be met. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations.

The Office Action admits that the reference fails to disclose a transparent layer. The Office Action states that forming a layer on the color filter would be advantageous. However, the assertion is impermissible hindsight reasoning based on the disclosure of the invention. Furthermore, the Office Action states that direct contact between the color filter layer and the liquid crystal layer might deteriorate the material of the liquid crystal layer. The Office Action provides no evidence for this assertion and this assertion is not suggested in Ohgawara. Thus, there is no suggestion or motivation to modify Ohgawara and the Office Action fails to establish a *prima facie* case of obviousness. Finally, as discussed in the specification at e.g., page 51, line 32-page 52, line 5, using a transparent layer increases image quality and contrast. If this feature had been obvious it would have been disclosed in the applied art.

Ohgawara discloses a feature in which a shielding film and a color filter are arranged in a surrounding portion outside a display portion. This structure shows that an end portion of the respective color filters (symbols 23, 3, 7, 17) is overlapped with the respective shielding films (symbols 6, 16, 26, 4), and the part between each color filter is surrounded by a shielding film.

Furthermore, the entire surface is covered by an overcoating film formed of polyimide thereon. Additionally, as shown in Fig. 4, the color filter is formed so as to be larger than the area of an electrode (10) which becomes pixels (2, 22).

In claim 37, a reflector is arranged on a rear surface of a dot area, and the dot area is provided with a first section (area) formed of a color filter and a second section (area) formed of a substantially transparent layer in a planar manner.

Ohgawara does not disclose this feature. Instead, in Ohgawara, the dot area is not provided with two sections (areas) in a planar manner. In Ohgawara, in the dot area, an overcoating film formed of polyimide and a color filter are laminated.

In claim 38, the thickness difference between the color filter and the substantially transparent layer is 0.5 μm or less.

Ohgawara does not disclose this feature. Instead, in Ohgawara, two sections (areas), the substantially transparent layer and the color filter, are not provided in a planar manner.

Claim 56 recites a color filter positioned between the liquid crystal layer and one of the first and second electrode, wherein the color filter is selectively arranged in the first section. The Office Action merely states that Ohgawara discloses the color filters formed in the display portion. This fails to address all of the features of claim 56 discussed above, specifically, a color filter positioned between the liquid crystal layer and one of the first and second electrode. Applicant respectfully submits all of the features of claim 56 are not disclosed by Ohgawara.

In claim 56, the color filter is selectively formed in the dot area. Ohgawara does not disclose this feature. Instead, in Ohgawara, the color filter is formed in the entire surface within the dot area.

In claim 57, two sections (areas), that is, first and second sections in which the color filter is formed in a planar manner, are provided in the dot area, and the first section is driven by applying a first voltage, and the second section is driven by applying a second voltage.

Ohgawara does not discloses these features. Instead, in Ohgawara, two sections (areas) do not exist within the dot area. Needless to say, there is not description about the sections being driven by different voltages.

In claim 58, the first voltage is smaller than the second voltage. There is no corresponding voltage in Ohgawara, and needless to say, there is no description about the voltages.

In claim 60, the substantially transparent layer is arranged on the periphery of the dot area in a planar manner.

Ohgawara does not disclose this feature. Instead, in Ohgawara, the shielding film is arranged on the periphery of the dot area (pixels 2, 22 or electrode 10) in a planar manner.

Claim 61 recites a color filter arranged in the dot area, wherein a size of the color filter is smaller than the dot area. Claim 62 recites a color filter arranged in the first section, the first section comprising about 15% or more and about 45% or less of the dot area. The Office Action states that the size of color filters is commonly smaller then the dot area in the art. Thus, the Office Action appears to be taking Official Notice of this feature. Applicants respectfully traverse the Office Action's use of Official Notice. MPEP §2144.03 provides that "when a rejection is based on facts within the personal knowledge of the Examiner, the data should be stated as specifically as possible."

Furthermore, assertions of technical facts in areas of esoteric technology must always be supported by citation of some reference work. Applicants respectfully request that the Examiner provide evidence in the next Office Action or explain why no evidence is required regarding this feature.

Furthermore, in Ohgawara, the size of the color filter is larger than the dot area (pixels 2, 22 or electrode 10).

In claim 62, the color filter is arranged in between 15% and 45% of an area in which light modulation can be performed.

Ohgawara does not disclose this feature. Instead, in Ohgawara, the size of the color filter is larger than the dot area (pixels 2, 22 or electrodes 10).

As a general matter, concerning the technology which is described from page 51, line 32 to page 52, line 5 in the specification, it is conventional that a shielding film is formed between respective dot areas as described in Ohgawara; however, when a shielding film is not formed, polyimide (substantially transparent layer) is inserted between the respective dot areas. However, it is not conventional that this area filled with this polyimide (substantially

transparent layer) is arranged in a dot area (provided with a reflector on a rear surface) in a planar manner.

II. Conclusion

In view of the forgoing, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Benjamin M. Halpern
Registration No. 46,494

JAO:BMH/gpn

Attachment:
Appendix

Date: May 13, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry;
Charge any fee due to our Deposit Account No. 15-0461

APPENDIX

Changes to Claims:

The following are marked-up versions of the amended claims:

38. (Twice Amended) A liquid crystal device according to claim ~~30~~37, the thickness of color filter and the layer is different, wherein the difference of level is 0.5μm or less.

56. (Amended) A liquid crystal device comprising:

a first electrode;

a second electrode opposing the first electrode;

a liquid crystal material provided between the first and the second electrode;

a dot area, formed at an overlapping portion of the first electrode and second electrode, for display;

a color filter positioned between the liquid crystal material and one of the first and the second electrode;

wherein the color filter is selectively arranged in the ~~first section~~dot area.